IN THE CLAIMS:

Listing of Claims:

1   1.   (original) A direction-finding method comprising the steps of:

2   identifying a transmitter by its transmission characteristics, the method
3   comprising the steps of:

4   receiving an incident transmission, said transmission defined by frequency
5   characteristics including a final resting frequency, said transmission emanating from a
6   spacially-defined bearing relative to said receiver;

7   generating a unique signature responsive to said characteristics of said
8   transmission;

9   classifying said signature responsive to said final resting frequency; and

10   comparing said signature with a set of other transmission signatures; and

11   generating a transmitter-specific first line of bearing defined by said spacially
12   defined bearing and responsive to said comparing.

1   2.   (original) The method of Claim 1, wherein said generating comprises generating
2   said unique signature by applying a Fourier Transform to said received transmission.

1   3.   (original) The method of Claim 2, wherein said receiving comprises receiving a
2   transmission defined by at least a keyup frequency characteristic in addition to said final
3   resting frequency.

1   4.   (original) The method of Claim 3, further comprising:

2   a first generating step prior to said signature generating step, said first generating
3   step comprising generating an intermediate frequency sample responsive to said received
4   incident transmission, said intermediate frequency sample defined by said frequency
5   characteristics; and

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6   a second generating step prior to said signature generating step, said second

7   generating step comprising generating a digital intermediate frequency sample based on

8   said intermediate frequency sample.

1   5.   (original) The method of Claim 4, wherein said signature generating step is

2   responsive to said frequency characteristics of said digital intermediate frequency sample.

1   6.   (original) The method of Claim 5, wherein said comparing step comprises

2   comparing said transmission signature with a set of other transmission signatures, all of

3   said other transmission signatures defined by a final resting frequency classification

4   substantially the same as said transmission signature of said received transmission.

1   7.   (original) The method of Claim 6, further comprising a second comparing step, said

2   second comparing step being executed when said set of other transmission signatures

3   fails to comprise a transmission signature defined by a final resting frequency

4   classification substantially the same as said transmission signature of said received

5   transmission, said second comparing step comprising comparing said received

6   transmission signature to one or more sets of other transmission signatures defined by

7   final resting frequency classifications not substantially the same as said transmission

8   signature of said received transmission.

1   8.   (original) The method of Claim 7, further comprising a data repository addition step

2   after said second comparing when said set of other transmission signatures fails to

3   comprise a transmission signature substantially the same as said transmission signature of

4   said received transmission, said data repository addition step comprising adding said

5   transmission signature of said received transmission to a data repository.

1   9.   (original) The method of Claim 8, wherein said data repository addition step

2   comprises adding said transmission signature of said received transmission to a set of

3   said data repository defined by said final resting frequency of said received transmission.

1   10.   (original) The method of Claim 9, further comprising repeating said identifying

2   step and said line of bearing generating step for a second said transmitter, whereby a

3   second line of bearing is generated.

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1   **11.** (original) The method of Claim 10, further comprising displaying said first and

2   second lines of bearing on a single operator display interface.

1   **12.** (original) The method of Claim 11, wherein said first line of bearing is visually

2   distinct from said second line of bearing.

1   **13.** (original) The method of Claim 12, wherein said first and second lines of bearing

2   are colored differently.

1   **14.** (original) A emitter location system for determining the location of a source of an

2   incident transmission signal, comprising:

3   a receiver for receiving a said incident signal;

4   a transmission signature device, said transmission signature device comprising:

5   an analog-to-digital converter device for converting said incident signal

6   into digital data format;

7   a fourier transform generator for generating a transmission signature of

8   said received signal by applying a fourier transform to said digital data;

9   a matching system for matching said transmission signature of said

10   transmission with a set of transmission signatures stored in a data repository associated

11   with said matching system; and

12   a plotting device for plotting a line of bearing representative of the relative orientation

13   between said receiver and said source of said incident signals.